

REMARKS

Applicants gratefully acknowledge the Examiner's comments during a telephone interview on June 21, 2003, including the Examiner, the below signing attorney for the Applicants, and the lead inventor of the present application, Dr. Eric Saund.

Applicants note the following discussion will touch on the substance of that interview. However, it is noted that in summary, the discussion related to the various independent claims and the potential amendments to those claims, as well as specific discussion as to the technology of the present application and the prior art cited in the rejection of the present claims, including Bushey, Cunningham et al. and Withgott et al.

Independent Claim 1 is now Distinguished from the Cited Art

The essential limitations of old claim 4 have been incorporated into claim 1, and claim 4 is cancelled. In discussing the distinctions between the cited art and the present application, Applicants noted the language of claim 4, which includes the concept of altering the bitmapped image into multiple alternative structured representations. Applicants maintain the concepts are shown or fairly disclosed in the cited art. Claim 4, was rejected under the combination of Bushey, Cunningham et al. and Withgott et al. Applicants respectfully submit neither Bushey, Cunningham et al. or Withgott et al. are directed to the technology of the present application, which provides for the generation of perceptually salient structures from a received bitmapped image (original claim 1). Further, it is submitted the concepts of the multiple alternative interpretations of the bitmapped image as set forth in claim 4 are not taught or fairly suggested.

With specific attention to Withgott et al., the interpretation of this reference is respectfully traversed. Withgott et al.'s description of morphology and/or other techniques to cluster word shapes into equivalent classes is not related to the concept of alternative representations of image structures as discussed in the present application.

For example, FIGURES 3A-3H (and the corresponding discussion in the application) illustrate the concept of alternative interpretations as claimed now in independent claim 1. It is submitted that by a review of the alternative interpretations

as disclosed in the specification, and using this as a reference (but not reading limitations into the claims), the distinctions between Withgott et al., as well as Bushey and Cunningham et al.) as to the present application are clearly shown.

In discussing these distinctions during the telephone conference, it became clear the Examiner had an understanding of alternative interpretations which was not aligned with Applicants intended use in the present application. We believe, following the discussion with the Examiner, Applicants' use of the term "alternative interpretations" was now understood by the Examiner and is understood to be different from the concepts of the cited references.

The Examiner, however, requested that additional language be added to further clarify these distinctions. Therefore, Applicants have not only added the language of claim 4 into claim 1, they have also further defined and explained the distinctions by noting the bitmapped images are altered into multiple, simultaneously existing, structured alternative interpretations of the bitmapped image. It is then further recited that each of the alternative interpretations are a plausible intended output of the user.

Again, with reference to FIGURES 3A-3H, a user may consider any of the simultaneously existing structures as their intended final product. None of the cited art addresses this concept. Rather, if an interpretation is being transformed, in the cited art, even if there are multiple interpretation, they would be sequential altered interpretations, which the user would not be able to manipulate. Additionally, even if the prior art systems showed multiple potential interpretations, they are not all plausible intended outputs of the user. Rather, the user will select only one of those interpretations.

On the other hand, in the present system where each of the alternative interpretations may be plausible intended outputs of the user, so that any can be selected. In addition, and as shown in new claims 26 and 27 to emphasize this point, the objects of the existing alternative interpretations may be intermixed. This concept is shown, for example, in FIGURE 3E, where an informal box is encompassing formalized text, the objects of each taken from different alternative interpretations.

It is respectfully submitted that Applicants' amendments track the Examiner's request for more precise language distinguishing the cited art. For this reason, it is submitted claim 1 is distinguished.

Independent Claim 5 is Distinguished from the Cited Art

With particular attention to claim 5, Applicants note the Examiner has discussed the Microsoft Paint program as being able to manipulate bitmapped images. However, Applicants respectfully note that when one performs a flip/rotate in the Paint program, the user is simply causing the pixels to be rearranged. This is not in any way similar to the editing of a formal structured object as discussed in the present application. In particular, manipulating a collection of pixels forming the image of formatted text as shown in the example in the Office Action is not manipulation of a formal structured object. The Office Action presents the example of inverting an image of the characters "ON" to "NO." This is not manipulating a formal structured object. In Microsoft Paint, "when one is not in Paint but is in the Enter Text mode" the characters might be considered formal structured objects, since they can be modified as symbolic entities. For example, characters can be changed using the backspace and the character keys, and their font and colors may be modified. However, as soon as this text is dropped into the canvas, it ceases to be formal structured objects and becomes simply a set of pixels. If they were formal structured objects, the ON/NO text could be edited using the meaningful operations associated with the text, such as switching these to lower case. However, and this can be verified by the Examiner in Microsoft Paint, that it is not possible for Microsoft Paint, or any other Paint programs, to perform this option.

Thus, a point in the present application is the distinction between the bitmapped representation and a structured representation, and the operations which are available in these two modes. From the above, it is shown Microsoft Paint does not therefore manipulate structured object.

For this reason, it is submitted claim 5 is distinguished.

Dependent Claims 6-12 are Distinguished from the Cited Art

With particular attention to claims 6 and 7, the reference to Ohmori et al.'s "slide production software" is respectfully traversed as not being directed to the concepts set

forth in these claims. Ohmori et al. is concerned with medical image data. However, it does not discuss or fairly disclose anything regarding a structured object representation. Electronic slides of the present application and those claimed herein are presentation software slides similar to PowerPoint. On the other hand, Ohmori et al. has no discussion to being a structured text/graphics editor as claimed specifically in claim 6.

With attention to paragraph 7(B) of the Office Action, the reference to Ohmori et al.'s column 12, lines 1-12 use of the term "alternative graph" is again respectfully traversed. Ohmori et al. discusses a pre-readout process for copying medical image data. However, we cannot find any discussion regarding the alternative graph as presented in the present application.

Further, with attention to the rejection of claim 11, the use of Smith as showing the "alternative graph" as claimed and clearly disclosed in the present application is inappropriate. Particularly, the present application has a formal representation which is identified as an "alternative graph", because it explicitly represents alternative representations. On the other hand, as quoted by the Office Action, Smith states "one skilled in the art will appreciate that alternative graph structures may equivalently be used" Clearly, Smith is using the word "alternative" as an adjective modifying the phrase "graph structures." Unlike the present invention, Smith's graph structures themselves do not represent alternatives as set forth in the meaning of the present application.

Therefore, Applicants respectfully submit that the use of Smith is inappropriate. As requested the Examiner, Applicants have added additional language to the claims to emphasize the above-noted distinctions. For these reasons, claims 6-12 are distinguished from the cited art.

Independent Claim 13 is Distinguished from the Cited Art

For the reasons detailed above in connection with independent claim 1, it is submitted claim 13 is not distinguished. In particular, while the claim is believed to recite distinguishing subject matter as presently presented. Applicants have added language related to the altering language of claim 1.

Dependent Claims 14 and 15 are Distinguished from the Cited Art

As claims 14 and 15 depend from and further define the concepts of the present application, it is submitted these claims are also distinguished.

CONCLUSION

For the reasons detailed above, it is respectfully submitted all claims remaining in the application (Claims 1, 5-15 and 26, 27) are now in condition for allowance. An early notice to that effect is therefore earnestly solicited.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Mark Svat, at Telephone Number (216) 861-5582.

Respectfully submitted,

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Date



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